JUN 1 5 2011

# 1.4 510(k) Summary of Safety and Effectiveness

Submitted by:

Herbert Crane

Director, Global Regulatory Affairs

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Date of Submission:

January 13, 2011

Classification Name:

Endosseous Dental Implant Abutment (21 CFR 872.3630)

Trade or Proprietary

or Model Name:

NobelProcera Zi Abutment Thommen Platforms

Legally Marketed Devices:

Nobel Biocare - NobelProcera Ti Abutment Thommen Platforms

(K101714)

Thommen Medical AG – SPI Easy 4.0 Abutment (K071457)

Thommen Medical AG – SPI Dental Implant Abutments (K031747)

**Device Description** 

Nobel Biocare's NobelProcera Zi Abutment Thommen Platforms is an endosseous dental implant abutment. The abutment attaches directly to Thommen dental implants and provides a platform for restoration.

Nobel Biocare's NobelProcera Zi Abutments are designed and made individually to fit the individual requirements for each patient. The NobelProcera Zi Abutments are made entirely of zirconium oxide.

The abutments fit the Thommen SPI implant systems platform 3.5, 4.0, 4.5, 5.0, 6.0.

### Indications for Use

The NobelProcera Zi Abutments Thommen Platforms are premanufactured prosthetic components directly connected to endosseous dental implants and are intended for use as an aid in prosthetic rehabilitation. They are compatible with the Thommen Medical SPI 3.5, 4.0, 4.5, 5.0, and 6.0 implants.

## Technical Modifications of Predicate Device

The NobelProcera Zi Abutment for the Thommen Platform differs from the predicates by using the material zirconium oxide.

Summary of testing to demonstrate safety and effectiveness

Non-clinical test data was used to support the decision of safety and effectiveness. Clinical testing was not necessary. Non-clinical testing consisted of analysis of platforms to identify worst-case test samples and performance of fatigue testing of the worst-case samples in accordance with the FDA guidance Class II Special Controls Guidance Document: Root-form Endosseous Dental Implants and Endosseous Dental Implant Abutments.

# Conclusion

The information provided in this submission demonstrates that the device is substantially equivalent to the predicate devices.

# Substantial Equivalence Comparison to Predicate Devices

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A PREDICATE	NobelProcerarTitAbutments   ThommentWedical AG ST Thommen Medical AG. Thommen Platforms   SP Easy 4 O'Abutments   SPI Dental Implant Abutments   (K07.1453)   K1017.141   K10317.47)	Patient specific / machined	Oral Cavity	Thommen SPI implant systems platform 3.5, 4.5, 5.0, 6.0	CP Titanium	The Thommen SPI Dental Implant Abutments are intended to be used in conjunction with SPI System dental implants in the maxillary and/or mandibular arch to provide support for crowns, bridges or overdentures.
PREDICATE PREDICATE	i i nommen i Medical AG SPI, Easy 4, 0 Abutment (K07,1453)	Patient specific / machined	Oral Cavity	<u>Thommen</u> SPI implant systems platform 4.0	CP Titanium	The Thommen SPI Easy 4.0 Abutment is intended to be used in conjunction with SPI System dental implants in the maxillary and/or mandibular arch to provide support for crowns, bridges or overdentures.
PREDICATE	NobelProceral TitAbutments Thomnen Platforms (K101/14)	Patient specific / machined	Oral Cavity	Thommen SPI implant systems platform 3.5, 4.5, 5.0, 6.0	CP Titanium Titanium/vanadium alloy	The NobelProcera Ti Abutments Thommen Platforms are premanufactured prosthetic components directly connected to endosseous dental implants and are intended for use as an aid in prosthetic rehabilitation. They are compatible with the Thommen Medical SPI 3.5, 4.0, 4.5, 5.0, and 6.0 implants.
* * CANDIDATE	NobelProceral Zives Signature Abutment	Patient specific / machined	Oral Cavity	Thommen SPI implant systems platform 3.5, 4.0, 4.5, 5.0, 6.0	Zirconium Oxide	The NobelProcera Zi Abutments Thommen Platforms are premanufactured prosthetic components directly connected to endosseous dental implants and are intended for use as an aid in prosthetic rehabilitation. They are compatible with the Thommen Medical SPI 3.5, 4.0, 4.5, 5.0, and 6.0 implants.
ATTRIBUTE		Design/ construction	Anatomical Site	Platform compatibility	Device Material	Indications for Use



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Nobel Biocare AB C/O Mr. Herbert Crane Director, Global Regulatory Affairs Nobel Biocare USA LLC 22715 Savi Ranch Parkway Yorba Linda, California 92887

JUN 15 2011

Re: K110171

Trade/Device Name: NobelProcera Zi Abutment Thommen Platforms

Regulation Number: 21 CFR 872.3630

Regulation Name: Endosseous Dental Implant Abutment

Regulatory Class: II Product Code: NHA Dated: May 13, 2011 Received: May 16, 2011

### Dear Mr. Crane:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to

http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Anthony Watson, B.S., M.S., M.B.A.

Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and Radiological Health

510(k) Number (if known): KIIO17								
Device Name: NobelProcera Zi Abutment Thommen Platforms								
Indications For Use:								
The NobelProcera Zi Abutments Thommen Platforms are premanufactured prosthetic components directly connected to endosseous dental implants and are intended for use as an aid in prosthetic rehabilitation. They are compatible with the Thommen Medical SPI 3.5, 4.0, 4.5, 5.0, and 6.0 implants.								
Prescription Use X AND/OR Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)	·							
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Concurrence of CDRH, Office of Device Evaluation (ODE)								
Robert Sherz DDS for Dr. Swan Runner (Division Sign-Uff)								
Division of Anesthesiology, General Hospital Infection Control, Dental Devices Page 1 c	of <u>1</u>							
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